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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,342	11/21/2003	Valdimir Sklovsky	CS22954RA/10-192	3315

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EXAMINER

PATEL, NITIN

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/719,342	<b>Applicant(s)</b> SKLOVSKY ET AL.	
	<b>Examiner</b> Nitin Patel	<b>Art Unit</b> 2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7,9-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heie (US 20030043096 A1).

As per claims 1,9,10,11,17,22 Heie shows an electronic device (in fig.1a-c) comprising: a display panel (In fig.1b element 135); a display controller (in fig.3 element 305 is being controlled by elements 330 and 332) that controls the display panel; a plurality of data lines that supply image data to the display panel (data lines connected to the column driver 332 to send data to the pixel of the display), wherein the data lines include data lines for supplying red image data, data lines for supplying green image data, and data lines for supplying blue image data; and masking gates(read as buffer element 322) that mask selected ones of the data lines at predetermined times to adjust the pixel depth of the image data supplied to the display panel (see section 0028 and 0032 in this section buffer is holding data by the controller processor that which pixel should be activated to displayed on the display, examiner is taking official notice that it is well known in the art in LCD display that pixels are part of red, green and blue color display which is controlled by the processor using the buffer (gate) to mask the predetermined pixel as chose by the processor to which pixels to activate to produced

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image data on the display).

As per claim 2, Heie shows wherein the electronic device includes a processor coupled to the masking gates, and the processor provides one or more control signals to an input of each of the masking gates (in fig.3 element 325 is connected to buffer 322)

As per claim 3, Heie shows the electronic device includes a processor, wherein the processor is coupled to the masking gates, and the processor causes the masking gates to mask the selected ones of the data lines when the electronic device is in a power saving mode (see section 0032 and 0033 that which pixels to make it brighter and lighter using the masking pattern).

As per claims 4,14,20 Heie shows the masking gates are coupled to an input of the display controller (in fig.3 buffer element 332 is connected to the display controller).

As per claim 5, Heie shows comprising a display panel interface, wherein an output of the display panel interface is coupled to an input of one or more of the masking gates (as shown in fig.3 element 332).

As per claim 6, Heie shows a video buffer, wherein an output of the video buffer is coupled to an input of one or more of the masking gates (buffer 322 in fig.3).

As per claims 7, 15,21 Heie shows wherein the electronic device is a mobile telephone (In fig.1b).

As per claim 12, Heie shows wherein the method comprises disabling the masking when the electronic device is not in a power saving mode (see section 0032 and 0033).

As per claim 13, Heie shows wherein the masking is such that image data lines that are not masked are allowed to change value according to image data that is sent to the masking gates (In section 0032 which pixel to set darker and brighter according to a mode of the value).

As per claim 16, Heie shows wherein masking reduces the pixel depth of the image data, and the method includes producing images based on a full pixel depth, when masking is not being performed, and producing images at a reduced pixel depth, when the masking is being performed, and the method includes using the same image data as a source when producing images based on a full pixel depth and when producing images at a reduced pixel depth (see section 0032 and 0033).

As per claim 18, Heie shows disabling the masking when the electronic device is not in a power saving mode (section 0032 when no power conservation mode).

As per claim 19, Heie shows the method includes permitting data lines that are not masked to change state according to image data being sent to the masking gates (in section 0028 and 0032 and 0033).

As per claim 20, Heie shows employing a processor (in fig.3 element 325) to determine which of a plurality of data lines are the selected lines, wherein the method further includes varying the number of selected lines to vary the power consumption of the electronic device (see section 0030).

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heie (US 20030043096 A1) in vie of Weiman et al., (U.S. patent No. 4,979,136).

As per claim 8, Heie does not shows a AND gate as a masking gate. Weiman

shows masking gates include an AND gate (in fig.11 and 11a). It would have been obvious to one of ordinary skill in the art, at the time of the invention was made to have combined the teaching of Weiman's with display buffer of Heie's because it would have selected and simplified pixels value in a predetermined number of significant bits.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin Patel whose telephone number is 571-272-7677.

The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin H. Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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January 22, 2006

*Nitin Patel*